

- PROJECT DESCRIPTION
- I. GENERAL
- THIS PROJECT IS LOCATED IN PRINCE GEORGE'S COUNTY, MARYLAND AND INVOLVES ROADWAY IMPROVEMENTS, AND RECONSTRUCTION OF AN EXISTING SIGNAL THAT IS AFFECTED BY THESE IMPROVEMENTS. MD 458 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.
- II. INTERSECTION OPERATION
- THE PROPOSED TRAFFIC SIGNAL WILL OPERATE IN A NEMA SIX (6) PHASE, FULLY TRAFFIC ACTUATED MODE. THE MD 458 APPROACHES WILL OPERATE CONCURRENTLY, WITH EXCLUSIVE LEFT TURN PHASES. THE SUITLAND ROAD APPROACHES WILL OPERATE SEPERATELY.
- AN EXISTING EIGHT PHASE FULLY TRAFFIC ACTUATED CONTROLLER WILL REMAIN.
- III. SPECIAL NOTES
1. THE SIGNAL SHOP WILL BE NOTIFIED TO PERFORM INTERNAL WIRING OF THE CABINET AT MD 458 AND SUITLAND ROAD. ALL CABLE SHALL BE IDENTIFIED AND BROUGHT INTO THE CONTROLLER BY THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY MR. EDWARD RODENHIZER, SHA SIGNAL SHOP AT (410) 787-7650 SEVENTY-TWO (72) HOURS IN ADVANCE OF THIS WORK.
2. MOT PLATES FOR THIS PROJECT WILL BE AS FOLLOWS: 104.00 TO 104.00-12, 104.02-01, 104.03-01

- CONSTRUCTION DETAILS
- (A) EXISTING CONTROLLER TO REMAIN
- (B) EXISTING STEEL STRAIN POLE TO REMAIN, INSTALL NEW SHIELD ASSEMBLY
- (C) REMOVE EXISTING STEEL STRAIN POLE
- (D) INSTALL 14 INCH X 32 FOOT STEEL STRAIN POLE AND SHIELD ASSEMBLY (NOTE: 1 - 4 INCH SCHEDULE 80, 90 DEGREE PVC CONDUIT BEND, 4-2 1/4" X 96" ANCHOR BOLTS IN BASE)
- (E) EXISTING PEDESTAL POLE TO REMAIN
- (F) REMOVE EXISTING PEDESTAL POLE
- (G) EXISTING HAND HOLE TO REMAIN
- (H) REMOVE EXISTING HAND HOLE
- (I) INSTALL HANDHOLE
- (J) REMOVE EXISTING SPAN WIRE
- (K) INSTALL 3/8 INCH SPAN WIRE, SIGNAL HEADS AND SIGN
- (L) ABANDON EXISTING LOOP DETECTORS
- (M) INSTALL 6 FT. X 30 FT. LOOP DETECTOR 1 1/4 INCH FLEXIBLE TUBING (3-6-3 TURNS)
- (N) INSTALL MICROLOOP PROBE SET 500 FT. LEAD-IN
- (O) EXISTING CONDUIT TO REMAIN
- (P) INSTALL 2 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - TRENCHED
- (Q) INSTALL 2 IN. SCHEDULE 80 RIGID POLYVINYL CHLORIDE CONDUIT - BORED
- (R) REMOVE EXISTING SIGNAL HEAD
- (S) INSTALL 24 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING (STOP BAR)
- (T) INSTALL 1 IN. GALVANIZED CONDUIT FOR DETECTOR SLEEVE
- (U) INSTALL 1 IN. LIQUID TIGHT FLEXABLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
- (V) ABANDON EXISTING PROBES
- (W) ABANDON EXISTING CONDUIT

THE FOLLOWING CONTACT PERSONS FOR DISTRICT # 3 ARE AS FOLLOWS:

Mr. Richard L. Daff, Sr.
Chief, Traffic Operations Division
(410) 787-7630

Mr. Charles Watkins
District Engineer
(301) 513-7311

Mr. Majib Shakib
Asst. District Engineer - Traffic
(301) 513-7358

Mr. Randy Brown
Asst. District Engineer - Maintenance
(301) 513-7304

Mr. Augustine Rebish
Acting Engineer - Utility
(301) 513-7350

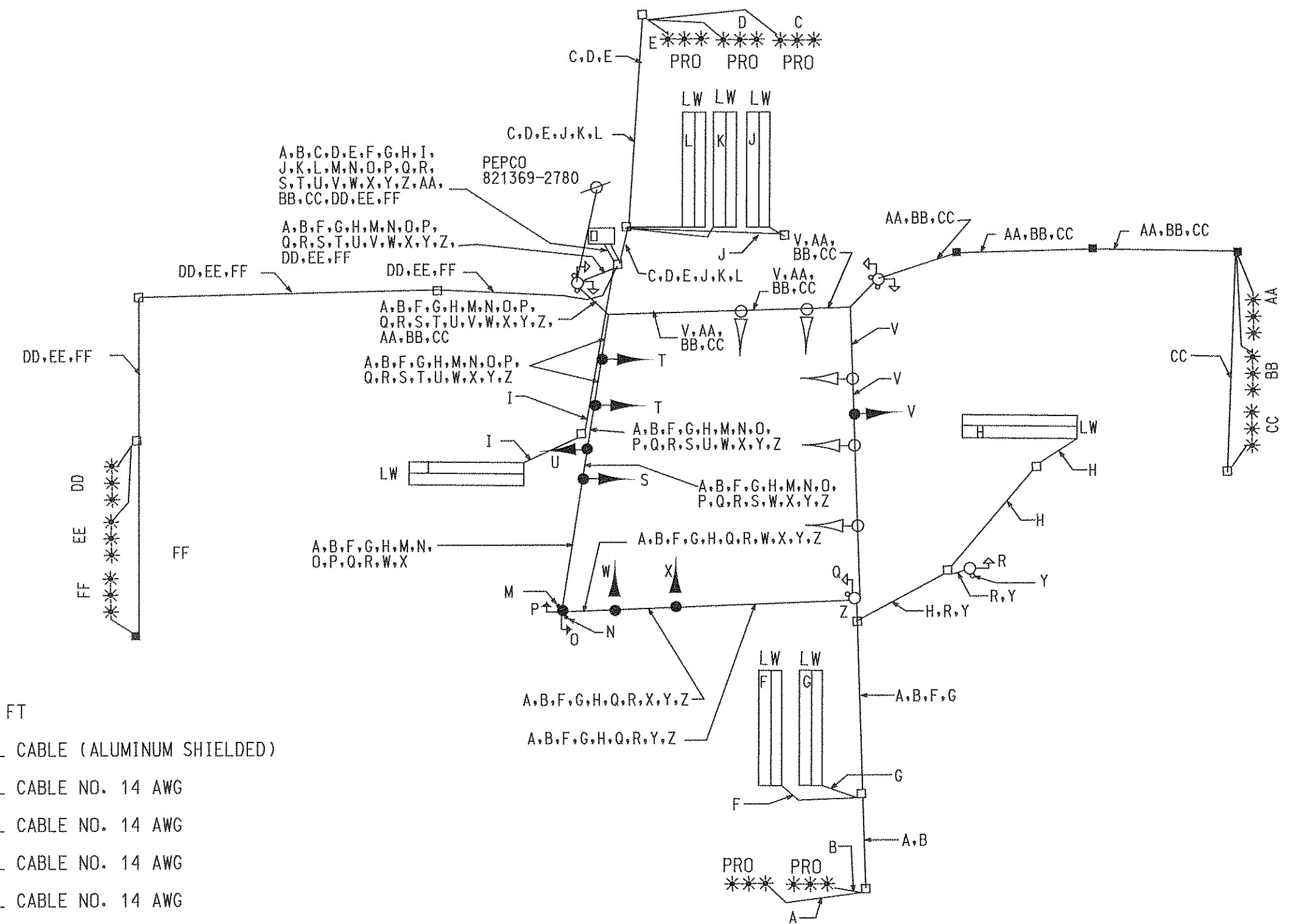
EQUIPMENT LIST		
A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR		
ITEM NO.	QUANTITY	DESCRIPTION
900001	2 EA	12" I-WAY, 3-SECTION (R,Y,G) TRAFFIC SIGNAL HEAD - SPAN MOUNT
900001	3 EA	12" I-WAY, 3-SECTION (RA,YA,GA) TRAFFIC SIGNAL HEAD - SPAN MOUNT
900001	1 EA	12" I-WAY, 4-SECTION (R,Y,G,GA) TRAFFIC SIGNAL HEAD - SPAN MOUNT
900001	1 EA	12" I-WAY, 5-SECTION (R,Y,YA,G,GA) TRAFFIC SIGNAL HEAD - SPAN MOUNT
900001	2 EA	12" I-WAY, 2-SECTION (DON'T WALK, WALK) PEDESTRIAN SIGNAL HEAD - POLE MOUNT
900001	2 EA	PEDESTRIAN PUSH BUTTON AND SIGN
9090	165 SF	SHEET ALUMINUM SIGNS
	3 EA.	R3-5L SIGN (30 IN. X 36 IN.) *LEFT TURN ONLY*
	1 EA.	SHIELD ASSEMBLY *EAST, MD 458, LEFT ARROW* (48 IN. X 75 IN.) - POLE MOUNT
	1 EA.	SHIELD ASSEMBLY *EAST, MD 458, RIGHT ARROW* (30 IN. X 51 IN.) - POLE MOUNT
	1 EA.	SHIELD ASSEMBLY *WEST, MD 458, LEFT ARROW* (48 IN. X 75 IN.) - POLE MOUNT
	1 EA.	SHIELD ASSEMBLY *WEST, MD 458, RIGHT ARROW* (30 IN. X 51 IN.) - POLE MOUNT
	1 EA.	SHIELD ASSEMBLY *NORTH, MD 218, RIGHT ARROW* (30 IN. X 51 IN.) - POLE MOUNT
	1 EA.	SHIELD ASSEMBLY *NORTH, MD 218, LEFT ARROW* (48 IN. X 75 IN.) - POLE MOUNT
	1 EA.	SHIELD ASSEMBLY *SOUTH, MD 218, RIGHT ARROW* (30 IN. X 51 IN.) - POLE MOUNT
	1 EA.	SHIELD ASSEMBLY *SOUTH, MD 218, LEFT ARROW* (48 IN. X 75 IN.) - POLE MOUNT
B. EQUIPMENT TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR		
ITEM NO.	QUANTITY	DESCRIPTION
585445	210 LF	FURNISH AND INSTALL 24" WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE (STOP BAR)
801004	4.65 CY	FURNISH AND INSTALL CONCRETE SIGNAL FOUNDATION
805011	100 LF	FURNISH AND INSTALL 1 IN. ELECTRICAL CONDUIT - GALVANIZED SLEEVE
805105	300 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 PVC CONDUIT - BORED
805125	110 LF	FURNISH AND INSTALL 2 IN. SCHEDULE 80 PVC CONDUIT - TRENCHED
811001	4 EA	FURNISH AND INSTALL HANDHOLE
813010	8 EA	BAND SIGN TO SIGN SUPPORT
818005	1 EA	REMOVE AND SALVAGE STRAIN POLE
818007	1 EA	REMOVE AND SALVAGE PEDESTAL POLE
819001	215 LF	REMOVE SPAN WIRE AND ASSOCIATED WIRING
860002	2 EA	INSTALL 12 IN. I-WAY 3-SECTION (R,Y,G) SIGNAL HEAD - SPAN MOUNT
860003	3 EA	INSTALL 12 IN. I-WAY 3-SECTION (RA,YA,GA) SIGNAL HEAD - SPAN MOUNT
860007	1 EA	INSTALL 12 IN. I-WAY 4-SECTION (R,Y,G,GA) SIGNAL HEAD - SPAN MOUNT
860008	1 EA	INSTALL 12 IN. I-WAY 5-SECTION (R,Y,YA,G,GA) SIGNAL HEAD - SPAN MOUNT
860068	2 EA	INSTALL 12 IN. I-WAY 2-SECTION PEDESTRIAN SIGNAL HEAD - POLE MOUNT
861104	1240 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR ALUMINUM SHIELDED
861105	400 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR NO 14 AWG
861106	1020 LF	FURNISH AND INSTALL ELECTRICAL CABLE 3-CONDUCTOR NO 14 AWG
861107	305 LF	FURNISH AND INSTALL ELECTRICAL CABLE 5-CONDUCTOR NO 14 AWG
861108	420 LF	FURNISH AND INSTALL ELECTRICAL CABLE 7-CONDUCTOR NO 14 AWG
862101	2950 LF	FURNISH AND INSTALL LOOP WIRE IN FLEXIBLE TUBING
862102	800 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
865201	2 EA	INSTALL PUSHBUTTON AND SIGN
869102	220 LF	FURNISH AND INSTALL STEEL SPAN WIRE - 3/8 IN. DIAMETER
800000	1 EA	FURNISH AND INSTALL STRAIN POLE 14 IN. X 32 FT.
800000	11 EA	FURNISH AND INSTALL MICROLOOP PROBE SET 500 FT. LEAD IN
814004	5 EA	REMOVE AND SALVAGE EXISTING SIGNAL HEAD
813015	7.5 LF	INSTALL OVERHEAD SIGN
805160	40 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXABLE NON-METALLIC CONDUIT FOR CONDUIT SLEEVE

The Power Company Representative Is:

POTOMAC ELECTRIC POWER COMPANY
8300 OLD MARLBORO PIKE
UPPER MARLBORO MARYLAND 20772
(301) 961-5325



WIRING DIAGRAM



WIRING KEY

- A-E, AA-FF MICROLOOP LEAD IN 500 FT
- F-L 2 CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
- M,N,Y,Z 2 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
- O-R 3 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
- S-V 5 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
- W,X 7 CONDUCTOR ELECTRICAL CABLE NO. 14 AWG
- PRO MICRO LOOP PROBES
- LW LOOP WIRE

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PHASE 1 & 5	-G	-G	R	R	-G	-G	R	R	R	-G	R	-G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 & 5 CHANGE TO PHASE 1 & 6 OR 2 & 5	-G	-G	G	G	-R	-R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 & 6	-G	-G	G	G	-R	-R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 1 & 6 CHANGE	-Y	-Y	Y	Y	-R	-R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 5	-R	-R	R	R	-G	-G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 5 CHANGE	-R	-R	R	R	-Y	-Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 2 & 6	-R	-R	G	G	-R	-R	G	G	R	R	R	R	W	W	W	W	DW	DW	DW	DW
PED CLEAR	-R	-R	G	G	-R	-R	G	G	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW	DW	DW
PHASE 2 & 6 CHANGE	-R	-R	Y	Y	-R	-R	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3	-R	-R	R	R	-R	-R	R	R	G	G	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 CHANGE	-R	-R	R	R	-R	-R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 3 ALTERNATE	-R	-R	R	R	-R	-R	R	R	-G	-G	R	R	DW	DW	DW	DW	DW	W	W	DW
PED CLEAR	-R	-R	R	R	-R	-R	R	R	-G	-G	R	R	DW	DW	DW	DW	DW	FL/DW	FL/DW	DW
PHASE 3 ALT. CHANGE	-R	-R	R	R	-R	-R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4	-R	-R	R	R	-R	-R	R	R	R	R	G	G	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 CHANGE	-R	-R	R	R	-R	-R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALTERNATE	-R	-R	R	R	-R	-R	R	R	R	R	-G	-G	DW	DW	DW	DW	W	DW	DW	W
PED CLEAR	-R	-R	R	R	-R	-R	R	R	R	R	-G	-G	DW	DW	DW	DW	FL/DW	DW	DW	FL/DW
PHASE 4 ALT. CHANGE	-R	-R	R	R	-R	-R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	DARK

REVISIONS	APPROVALS	MARYLAND DOT - STATE HIGHWAY ADMINISTRATION Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION			
D 9-98 PCD3170 C, MARK MODIFICATIONS DUE TO GEOMETRIC CHANGES	DESIGN SECTION	MD 458 (SILVER HILL ROAD) AT SUITLAND ROAD LOG MILE: 16021801.64			
C	ASST. DISTRICT ENGINEER, TRAFFIC				
B 9-20-89 MODIFICATIONS DUE TO GEOMETRIC CHANGES	CHEF, TRAFFIC ENGINEERING DESIGN DIVISION				
A 1-10-78 BOX SIGNAL DESIGN	DIRECTOR, TRAFFIC & SAFETY	DRAWN BY: STEVE RENZI	F.A.P. NO. US-9692(1)	GI NO.	SHEET NO.
		CHK. BY: STEVE RENZI	S.H.A. NO. P-332-001-385	246-D	OF
		SCALE: 1"=20'	COUNTY PRINCE GEORGE'S		
		DATE: 6-29-73			